

Specimens sent to me as from the brook were identical with the tank species; and therefore, not seeing any reason to question the correctness of the information received, I did not hesitate, in accordance with Mr. Choules's wishes, to publish the species. It is with much regret that I have now to state that it would seem I have been misinformed by Mr. Choules, and that the species does *not* occur in the brook in Bushy Park. *Physa acuta* must therefore be presumed to have been introduced into Kew Gardens from an exotic source.

Believe me to be, Gentlemen,

Your obedient Servant,

Sedgefield, Dec. 30, 1861.

ALFRED MERLE NORMAN.

*On the Reproduction of Porpita.* By M. LACAZE DUTHIERS.

At the end of August and about the middle of September, strong gales from the north-west threw upon one of the beaches near La Calle some *Porpita* in good condition; some of them, preserved in my aquaria, displayed their fringed tentacula, moved from place to place, and soon let fall to the bottom of the vessel a great number of small ovoid bodies marked with a white cross.

Having seen the small Medusæ of the *Velella*, I soon, by the aid of the lens, ascertained that I had before me exactly similar objects: under the microscope no doubt was possible.

The Medusæ of *Porpita* present the form of a little bell, of which the margin is furnished with a delicate membrane, and the summit bears a mass of brownish matter formed of large globules or cells. Starting from the bottom of the bell, four bands of a very dead white run almost to the margin of the orifice; the rest of the surface is as transparent as crystal. In the thickness of the tissues are lodged some small white bacilli, which give their colour to the bands; and outside these are scattered wide apart some large neurato-cysts, which raise the surface, and almost project from it.

The movements of contraction are exactly similar to those performed by all the Acalephs of this form; they are brisk and intermittent. When the contraction is effected, the water which fills the bell is driven out, and pushes before it the little membrane which borders the orifice.

These little Medusæ are easily recognized, with a lens, from their movements: the arms of the little white cross formed by the bands separate from and approach each other in the dilatations and contractions.

I could not get these young *Porpita* to live more than ten days; and all the changes which I could observe in them were limited to the almost complete disappearance of the large brown granulations at the summit of the bell, the increase of some yellowish granular cells which are observed on each side of the white bands forming the cross, the disappearance of some neurato-cysts, and, lastly, the formation at the summit of the bell of a cellular nipple, the further transformations of which could not be traced.

The little bodies just described detach themselves from the very numerous tentacles which surround the central trunk and clothe all

the lower surface of the disk from the filaments covered with barbules which occupy the circumference.

Each of these proliferous tentacles forms a regular raceme, of which the grains are small Medusæ in different states of development; they are suspended from a pedicle by the pole opposite to the orifice of the bell. The extremity of the tentacle is inflated, and presents an orifice.

A little later, about the 15th of September, the same winds blowing, I again met with *Porpitæ*, but this time very much damaged; nevertheless they still bore bunches of little Medusæ; and some *Veಲ್ಲæ* which I collected in better condition, in the same locality, furnished me with very numerous little medusiform corpuscles. In relation to the period of reproduction, this fact is worthy of remark. In 1858, during the month of May, I obtained great quantities of Medusæ from *Veಲ್ಲæ*, which I was able to observe for a considerable time. If, therefore, the reproduction takes place in Africa as in Corsica, we may conclude that the production of the little medusiform corpuscles goes on for a long time.—*Comptes Rendus*, Nov. 11, 1861, p. 851.

*On some Points in the Anatomy of the Apteryx australis.*

By Prof. HYRTL.

The lumbar artery of this bird, when it arrives at the popliteal flexure, is divided (as it is generally) into two tibial arteries—an anterior and a posterior. The first of these, after having passed the interosseal tibial space, passes back over the plane of extension and the articulation of the knee to supply the anterior muscles in the femoral portion of the leg. The other artery also passes through the intertibial space, to come in front of the tibia, leaving behind it a very feeble branch, sufficient for the supply of the scarcely developed post-tibial muscles. The main branch runs downward between the extensors of the toes to the back of the tarsus, where it ramifies into digital arteries. Between the middle of the tibia and the centre of the tarsus, this artery is surrounded on all sides by an arterial plexus (rete mirabile), divided into a number of delicate branches, leaving a distinct impression on the corresponding portion of the tibia. If carefully examined, no doubt similar impressions might be found on the tibia of *Dinornis*, *Notornis*, and other extinct forms, whose only still extant representative is the *Apteryx australis*.—*Imp. Acad. Vienna*, Meeting, Oct. 10, 1861.

*On a gigantic Cuttle-fish, found in the Atlantic Ocean, between Madeira and Teneriffe.*

Several instances are on record of the occurrence of enormous Cephalopoda, which almost seem to warrant the belief, formerly prevalent in Scandinavia, in the existence of the *Kraken*. M. Milne-Edwards quotes Aristotle as speaking of a great Cuttle-fish five fathoms in length, and refers to other observers, such as Péron, who found, in the waters surrounding Tasmania, a Squid, of which the